Exhibit 1

OUTLINE FOR FIRE MANAGEMENT PLANS

TABLE OF CONTENTS

LIST OF FIGURES

In this area, list the figures that the park includes in the FMP to support the text.

Certain maps (listed below) are required to be within or appended to the FMP. Other maps are recommended,

Required and Recommended Maps

The following table shows required and recommended maps for parks with different fire program complexities. These maps may be included in the body of the FMP or in the appendices. For easy reference, all maps should be listed in the "List of Figures" in the FMP Table of Contents.

Maps should be updated as needed as part of the annual FMP update process.

MAP NAME	Parks with suppression only program	Parks with suppression and fuel treatment program	Parks with suppression, fuel treatment, and WFU program
○ Vicinity map with boundaries, adjacent ownership and roads	Required	Required	Required
○ Fire management units	Required	Required	Required
○ Planned fuel treatment locations (from 5 year plan)	NA	Required	Required
○ Areas allowing WFU	NA	NA	Required
○ Values to be protected	Recommended	Recommended	Recommended
○ Vegetation	Recommended	Recommended	Recommended
○ Fuels	Optional	Recommended	Recommended
○ Land status including wilderness and natural research areas	Recommended	Recommended	Recommended
○ Completed fuel treatments (all years)	NA	Recommended	Recommended

Many other maps may be useful and are recommended if they will help clarify the plan. These may include but are not limited to maps such as:

- Fire Return Interval Departure
- Fire Regime Condition Class

- Hazards to firefighters
- Aviation related maps such as helispots and aviation hazards
- Water sources
- Weather station (RAWS) locations
- Fire history maps

For parks that do not already have vegetation, fuels, and fire regime maps, these layers are, or will soon will be available for the entire country through LANDFIRE. Contact your regional Fire GIS contact or go to the LANDFIRE website for more information.

LIST OF TABLES

I. INTRODUCTION

A. State the reasons for developing this plan, including the requirement that all areas with vegetation capable of sustaining fire will develop a Fire Management Plan (quote or reference *DO 18* language).

B. Summarize the collaborative processes used to develop the underlying land management plan direction and the fire management plan, as well as additional collaborative opportunities that are available as the fire management plan is implemented.

C. State that: “The plan will also implement fire management policies and help achieve resource management and fire management goals as defined in:

1. *Federal Wildland Fire Management Policy and Program Review (2001)*.

2. *Managing Impacts of Wildfires on Communities and the Environment, and Protecting People and Sustaining Resources in Fire Adapted Ecosystems – A Cohesive Strategy (USDOI/USDA*).

3. *A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: 10-Year Comprehensive Strategy Implementation Plan*.

D. State that the plan meets the requirements of the National Environmental Policy Act (NEPA), Section 7 of the Endangered Species Act (ESA), and Section 106 of the National Historical Preservation Act (NHPA) requirements. Provide a brief description of the compliance process taken to meet the above requirements.

Reference the supporting compliance documents such as the companion Environmental Assessment, Environmental Impact Statement, or Categorical Exclusion. Reference the decision document for the compliance document and included it an appendix to the plan.

E. Cite legal authorities for implementing this plan (See *RM 18*, Introduction chapter, section 5 for list of authorities).

II. RELATIONSHIP TO POLICY AND LAND MANAGEMENT PLANNING

This section is intended to link NPS and National Fire Policy to the fire management plan.

It should also summarize in broad programmatic terms the direction for managing fire on the landscape found in the park's land and resource management planning documents, including the General Management Plan and Natural and Cultural Resource Management Plan (or Resource Stewardship Strategy). Include the goals, objectives, and desired future condition described in those higher level planning documents as they pertain to fire management activities. These considerations will be reflected in the fire management plan.

A. Reference the current version of NPS *Management Policies* concerning fire management. Include relevant statements such as: "the presence or absence of natural fires within a given ecosystem is recognized as a potent factor...."

B. Relate the fire management plan to the enabling legislation and the purpose of this NPS unit.
   1. Briefly explain why the unit was established.
   2. Briefly summarize the significant resources and values of the unit.

C. Describe the park-wide strategic desired conditions (examples: "restore and maintain natural ecosystems" or "maintain the cultural landscape"), and state the goals and objectives contained in the park's General Management Plan (GMP)or similar foundational planning document as they pertain to fire management.

D. State the objectives of the park's Cultural and Natural Resource Management Plan (or Resource Stewardship Strategy) as they pertain to fire management.

E. State that the Fire Management Plan will help meet the objectives of the GMP and Resource Management Plan by translating those objectives

into specific fire management programs and actions designed to achieve the objectives.

III. WILDLAND FIRE MANAGEMENT STRATEGIES

A. General Management Considerations

Briefly describe in general how wildland fire will be managed, and identify any area-wide considerations, such as interagency partnerships, regional strategies, collaborators and collaborative processes to be incorporated in fire management strategies. The core principles of the 10-Year Comprehensive Strategy, including collaboration, priority setting, and accountability, should be considered.

B. Wildland Fire Management Goals

Develop and list the wildland fire management goals. These goals provide the programmatic direction for the wildland fire program. The goals should be stated within the context of the approved land and resource management plan direction. Goals should be found in the General Management Plan, or Cultural Management and Resource Stewardship documents. This section describes how the Fire Management Plan will safely and effectively contribute to achieving the goals in the approved land and resource management plan.

List the unit's fire management goals. These goals should be programmatic in nature, such as:

- (Example only): "Firefighter safety is the highest priority of every fire management activity."

- (Example only): "Suppress all unwanted and undesirable wildland fires regardless of ignition source to protect the public, private property, natural, cultural and historic resources of the unit."

- (Example only): "Use wildland and prescribed fire where and when appropriate as a tool to meet resource objectives within the unit."

See *Director's Order 18*, section 5.1.1-17 for other potential goals.

Discuss how these goals contribute to accomplishing regional or national strategic plans such as the 10-Year Comprehensive Strategy, and National Park Service Strategic Plan, as well as federal wildland fire policy. Fire program goals reflect federal fire policy, the core principles and goals of the

Comprehensive Strategy, and Cohesive Strategy where supported by land and resource management plans.

C. Wildland Fire Management Options

This section displays the scope of wildland fire management program elements that will be implemented within the administrative unit and further developed through the fire management plan. It should include a brief and defensible rationale for all wildland fire management components that are to be implemented.

Discuss the range of wildland fire management options to be applied, and how they relate to land and resource plan direction.

- Wildland Fire Suppression
- Prescribed Fire
- Wildland Fire Use
- Non-Fire Applications

D. NPS Unit Description of General Physical and Biotic Characteristics

1. Briefly discuss those physical and biotic characteristics of the administrative unit (vegetation, soil, aquatic resources, air, wildlife, cultural and historical resources, T&E species, and real property) sensitive to fire management operations within the NPS unit.

2. Briefly discuss the historic role of fire in the NPS unit (Reference more in-depth discussion to other documents). Discuss fire ecology and fire history of the park ecosystem. (Reference more in-depth discussion to other documents)

E. Description of Wildland Fire Management Strategies by Fire Management Unit

Identification of Fire Management Units (FMUs) is the cornerstone for planning the management of the wildland fire program. This section must tie directly to the decisions made in the land and resource management planning process by management area, aggregated into FMUs.

A Fire Management Unit is any land management area definable by objectives, management constraints, topographic features, access, values-to-be-protected, political boundaries, fuel types, or major fire regime groups, etc., that sets it apart from management characteristics of an adjacent unit. The development of FMUs should avoid redundancy. Each FMU should be

unique as evidenced by management strategies, objectives, and attributes. Management goals and objectives found in land and resource management planning are factors to be considered in developing strategies. FMUs may have dominant management objectives, such as wildland urban interface protection issues, and pre-selected strategies assigned to accomplish these objectives. The number of FMUs should be kept to the minimum.

1. FMU Identifier. Delineate FMUs on a map. Include or cite data source, format, and location for use in WFIP and/or WFSA development or other future management needs. The data characteristics list can be included in the Appendix. Whenever possible, FMUs should be generated and/or stored as GIS compatible data and be appropriately documented to NPS metadata standards. Park units without local GIS capability should draw upon regional resources.

    a. Briefly discuss those physical and biotic characteristics of the administrative unit (vegetation, soil, aquatic resources, air, wildlife, cultural and historical resources, T&E species, and real property) sensitive to fire management operations within the FMU. For more in-depth discussions of physical and biotic characteristics, reference the appropriate FMP compliance document, Resource Stewardship (or similar document), or include the information as an FMP appendix. Overlay locations of the characteristics discussed with FMU data in GIS generated maps – being aware of the need to protect disclosure of sensitive sites.

    b. Describe strategic and measurable fire management objectives that are specific to FMU. Identify and map locations associated with these objectives, when possible.

        - (Example only): Within Lost FMU 95 percent or higher of all unplanned and unwanted wildland fires are controlled during initial attack (48 hours or 100 acres).

        - (Example only): WUI FMU fuels modification objective is that 5 percent of high priority condition class 3 acres are moved to a better condition within 2 years.

        - (Example only): For Border FMU 100 percent of all prescribed burns are conducted in conjunction with XYZ Forest.

    c. Implementation.

Discuss constraints or decision criteria that will influence fire management activities within the FMU. These may include, but are not limited to, the following examples:

- (Example only): Prescribed burn projects in Smokey FMU must not impact air quality non-attainment areas outside the SE corner of the park.

- (Example only): Fire management actions within Cliff FMU cannot impact cultural resources in Dark Canyon.

- (Example only): Any proposed prescribed burn projects within High FMU must be coordinated with the High Valley Fire Department.

d. Briefly discuss the historic role of fire as it pertains to a FMU. Discuss fire ecology and fire history pertinent to a FMU. Include a description of the FMU's natural fire regime, suppression history and other land use activities that have affected fire management.

e. If a FMU contains fire dependent ecosystems and suppression tactics are the only management option, and where those areas have no proposed fuels treatments, describe the rationale for that strategy.

f. Briefly discuss the specifics of the wildland fire management situation for the FMU, including, but not limited to:

   1) Historical weather analysis. If appropriate: discuss specific weather conditions based on historical analysis or observations, occurring in the FMU that might impact fire management operations differently than the park unit in general.

      - (Example only): Within Lava FMU predicted east wind events will have significant impacts on fire behavior in the vicinity of Lava Canyon.

      - (Example only): Within Mount Baldy FMU cold front passages occurring from the northwest will create strong downslope winds in the vicinity of Tolman Ridge.

   2) Fire season. Discuss specific fire season anomalies, if any, associated with this FMU.

- (Example only): Due to the high elevation of Craig FMU fire season generally starts in late July two weeks after disappearance of the snowpack, rather then a mid-June start for the rest of the park.

- (Example only): Due to the general southwest aspect of Stone FMU fire season begins in early May not the end of June as the rest of the park experiences.

- (Example only): Fire season in Dry FMU on the eastside of the Continental Divide generally occurs in late April, not the late June start experienced for the rest of the park.

3) Fuel characteristics in relation to fire behavior; discuss any FMU specific changes in fuel characteristics during fire season due to drying, phenology, etc. that would impact fire management operations planning and implementation.

   - (Example only): Due to the high elevation, frost kill can occur in Mink FMU any time after mid-August after which time brush can be considered an available fuel.

   - (Example only): In a normal year, lodgepole pine stands in Foxtail FMU greater then 30 years old and having more then 500 stems per acre are prone to extreme fire behavior starting in late-August continuing through the end of fire season, generally this is two weeks earlier then experienced for similar stands in the rest of the park. (See map of stands in Appendix C)

   - (Example only); Historically, if an ignition occurs, jack pine stands in Highway FMU can exhibit extreme fire behavior after 6 continuous days of 90 degree “plus” Fahrenheit temperatures and daily relative humidity falls below 8 percent at 1400. (See map of Jack Pine Stands in Appendix F)

4) Fire Regime. If the park has information on FMU fire regime and/or condition class available, it can be included in this section. Nation-wide fire regime information, including mean fire return interval and fire regime condition class is, or soon will be, available through the LANDFIRE Program. See Chapter 20, Exhibit 10 for more information. If the unit presents this information, include a qualitative analysis of that information and

add relevant maps to the appendix.

5) Control problems and dominant topographic features. Briefly discuss control problems and dominant topographic features that affect suppression efforts in this FMU.

   - (Example only): Mt. Baldy FMU contains dense stands of beetle-killed mixed conifers positioned on steep south facing slopes. Access to this area is by foot making initial response suppression actions difficult. (See map of affected stands in Appendix H)

   - (Example only): The presence of Deep Creek and Lost Creek limit access to the interior of Sky FMU to helicopter ferrying or six mile hike-ins for crews. (see Map #6 in Appendix D)

   - (Example only): The north/south orientation of Hogback ridge effectively bi-sects access to the High Lakes FMU as either walk-ins from the west (4 miles – Trail 8A) or walk-ins from the east (2 miles – Trail 12A). (See Sky FMU Map #3 in Appendix E)

6) Briefly describe other elements of the fire environment affecting management in a FMU. Describe values to be protected, managed, or at risk; such as wildland urban interface considerations, adjacent landowners and agencies, Class I airsheds, etc. This description should be brief and focused on park characteristics that relate directly to fire management. Reference more extensive descriptions of the unit's natural environment that exist in other documents.

   - (Example only): Backcountry Lodge near Lost Lake in the SE corner of Lost Lake FMU must be protected from wildland fire (see map 12 in Appendix R).

   - (Example only): In-holdings (Sections 12 and 13) in Lava FMU must be protected from wildfire (see Lava FMU map 8, Appendix C).

   - (Example only): Best View Estates adjacent to the west side of Big FMU need to be protected from wildland fire. Contact Big View Home Owner’s Association prior to or as soon as

possible before initiating wildland fire operations (for contacts see Appendix D).

IV. WILDLAND FIRE MANAGEMENT PROGRAM COMPONENTS

A. Firefighter and Public Safety

1. All actions defined in the Fire Management Plan will conform to safety policies defined in agency and departmental policy, including, but not limited to:

   a. *Interagency Standards for Fire and Fire Aviation Operations* (NFES 2724).

   b. *NPS Director's Order 18*.

   c. *NPS Reference Manual 18*, Standards for Operations and Safety chapter.

2. The FMP must state that firefighter and public safety is our first priority, using the following statement:

   "Firefighter and public safety is our first priority. This Fire Management Plan and activities defined within reflect this commitment. The commitment to and accountability for safety is a joint responsibility of all firefighters, managers, and administrators. Individuals must be responsible for their own performance and accountability. Every supervisor, employee, and volunteer is responsible for following safe work practices and procedures, as well as identifying and reporting unsafe conditions. All firefighters, fireline supervisors, fire managers, and agency administrators have the responsibility to ensure compliance with established safe firefighting practices."

B. Air Quality and Smoke Management

1. Describe pertinent air quality issues.

2. Develop a program of action to manage smoke that complies with the requirements of the Clean Air Act and any additional issues identified through the NEPA process. Include all potential measures and techniques to prevent or mitigate adverse smoke events. A detailed smoke management plan may be developed cooperatively with the state regulatory agency responsible for regulatory air quality management for

each park and include in the appendix to the FMP or as an addendum. Describe any pertinent air quality issues, including:

a. Location of Class I airsheds.

b. Description of pre-identified smoke sensitive areas.

c. Local and regional smoke management restrictions and procedures.

C. General Implementation Procedures

Each Fire Management Plan is comprised of the following wildland fire management components that define the wildland fire program. Each of these components should be addressed in detail as it relates to the wildland fire management program (described in Section III). They should be addressed as needed either in this section, or a reference should be cited as to where this type of information can be found.

Implementation of wildland fire management components must be consistent with fire management capabilities and should consider the current and predicted conditions affecting fire behavior. *Preplanned decisions* based on historical fire behavior indices should be considered to most efficiently aid in decisions requiring appropriate management response, such as the Wildland Fire Implementation Plan (WFIP) *Stage I* analyses.

Fire managers will use these strategies for expediting the decision-making process when determining whether to respond to a new ignition using a suppression-oriented response, or as a wildland fire to be managed for resource benefit.

D. Wildland Fire Suppression

Describe the following elements related to wildland fire suppression as appropriate.

1. Describe the range of potential fire behavior.

2. Preparedness Actions.

a. Describe fire prevention activities, community education, community risk assessment, and other community assistance activities. Explain briefly the overall wildland fire prevention and community education and assistance programs for the Park (see

NPS *Reference Manual 18* chapters on Wildland Fire Prevention and Communication and Education for guidance).

b. Identify annual training activities needed by fire staff (e.g. annual safety refresher, qualifications and needs assessments, etc.).

c. Describe the work needed annually to ensure the fire readiness of equipment and supplies.

d. Fire weather and fire danger.

- Weather stations

Provide weather station catalog information and the fuel model used for identifying thresholds. Briefly explain how each station's catalog was developed. Weather station catalog information can be included in the appendix.

- NFDRS

Select an index or indices for trend monitoring. Identify the means, extremes, and percentiles for the index or indices for comparison. Describe weather and National Fire Danger Rating System (NFDRS) thresholds for the full range of fire management activities as they relate to historical large fire occurrence. Describe the thresholds determined from sources such as Palmer Drought Indices, METAFIRE, KBDI, ERC, BI, FIRES, or preparedness levels.

Fire danger thresholds are a key element, as they drive almost all fire management actions on the ground. Discuss the process for developing thresholds used for prevention, initial response, large fire actions, and prescribed fire activities. Include any charts used in the decision-making process. Explain the process for communicating fire danger information to field personnel.

e. Describe step-up staffing plan.

- Describe each preparedness level based on staffing classes substantiated by NFDRS indexes.

- Describe all actions planned and authorized at each level (includes discussions of preparedness, prevention, detection, information and education).

- For actions taken at each preparedness level, identify and describe the funding source and authority used to implement the actions.

3. Explain the Preparedness Plan.

   State that the Preparedness Plan is a comprehensive set of documents that provide management direction for wildland fire operations, including initial response and incident management activities. These actions are based on the goals, objectives, and wildland fire management strategies identified in the Fire Management Plan, as well as established local level procedures for wildland fire operations. Actions for initial response and incident management may be based on factors such as the time of year, burning conditions, resource commitment and fire activity. State that the Preparedness Plan will be reviewed annually and is included in the appendix.

   The NPS requires the following elements in the Preparedness Plan:

   - Initial Response, Dispatch, and Notification Plan
   - Strategic fire size-up procedures
   - List of park personnel available to assist with wildland and prescribed fires, including fire qualification
   - Annual Delegation of Authority from the Superintendent
   - Job Hazard Analyses for fire and fire aviation activities
   - Identified location of the current copy of the *Agency Administrator's Guide to Critical Incident Management* (NFES 1356)
   - Identified location of current fire cache inventory
   - Structure protection inventory and needs
   - Identified location of procedures for park evacuation and closure

- Minimum impact tactics guidelines that are used in the park, and where needed, wilderness (minimum tool) considerations

4. Initial Attack.

   Initial attack is an aggressive suppression action consistent with firefighter and public safety and values to be protected. This strategy is applied as either the only available response, when fire management plans have not been completed, or as the result of WFIP Stage I analysis under the appropriate management response process.

   a. Information used to set initial attack priorities.

      List of information sources for setting suppression priorities: wildland-urban interface, timber type and vegetation maps, wildlife habitat, archaeological sites, fuel maps, smoke/air quality impact models, sensitive natural resources (e.g., riparian areas). Include preplanned dispatch strategies.

   b. Criteria for the appropriate initial attack response consistent with GMP/RMP objectives.

      Determine and document the criteria that should be used to define the intensity of response warranted based on the risk, ambient conditions, other fire activity, and the expected effects on resources.

   c. Confinement as an initial attack suppression strategy.

      State that a confinement strategy may be implemented as the initial attack action as long as it is not used to meet resource management objectives. Confinement may be selected to maximize firefighter safety, minimize suppression costs, and to maximize availability of critical suppression and management resources during periods of high fire danger or fire activity in highly valued resource areas.

      State that confinement can also be a selection through the Wildland Fire Situation Analysis (WFSA) process when the fire is expected to exceed initial attack or available management capability. When confinement is selected as the initial action, a long-term plan is needed to guide the implementation of the

confinement strategy. The plan is approved and periodically reviewed and reauthorized by the superintendent or designee.

d. Typical fire response times on unit by resource type and time of year of fire danger.

e. Restrictions and special concerns by management area.

Summarize restrictions on equipment use, aircraft use, use and location of chemical fire retardant, tracked equipment, plows, and fireline explosives. List who may give restricted use exemptions (generally the superintendent or designee).

f. Include such issues as tribal relationships, local government issues, the hiring of local people, recycling, local issues in implementing firefighter R&R, etc.

5. Extended Attack and Large Fire Suppression.

a. Implementation plan requirements - WFSA development to determine extended attack needs. Describe who on the park staff will be involved in the development and review of this document (may include fire staff, resource staff, wilderness managers, concession specialists, rangers, etc.).

b. Complexity decision process for incident management transition - Define criteria for the need to transition from initial attack to extended attack, and from extended attack to Type I or Type II incident management.

c. Delegation of Authority for Incident Commander (in FMP appendix) - An example can be found in *Interagency Standards for Fire and Fire Aviation Operations*, Appendix H. Include a section on communication responsibilities or agreements between the park and the team, such as the role of the superintendent or media affairs office in speaking about the activity of the fire.

6. State the requirement for minimum impact suppression tactics as the policy for all fire management activities on NPS lands. Describe specific minimum impact suppression guidelines for this NPS unit (summarize here and include full guidelines and details in appendix).

7. Describe short and long-term rehabilitation guidelines and procedures (include details in appendix or addendum; this will facilitate the development of rehabilitation plans for future fires by establishing a basic protocol and standards).

8. Detail the completion and tracking of records and reports. Include a list of required reporting and the title of the position responsible for their completion. GPS/GIS data should be the norm for recording location data, whenever practical.

E. Wildland Fire Use

Wildland fire use must be based soundly on management objectives (public and firefighter safety, cultural and natural resource objectives, etc.) and may include the full range of fire management strategies on a fire's entire perimeter. State that a Wildland Fire Implementation Plan (WFIP) will be initiated for all wildland fires occurring in Fire Management Units designated for wildland fire use. Determine who will be responsible for completing the Stage I: Initial Fire Assessment that provides the decision framework for selecting the appropriate management response. Operational management decisions are described in the WFIP. Specific WFIP requirements are outlined the Wildland Fire Use Implementation Procedures Reference Guide, hereafter referred to as the Implementation Guide.

The Stage I: Initial Fire Assessment includes the Strategic Fire Size-Up, Decision Criteria Checklist, Management Actions, and Periodic Fire Assessment. In FMU development, programmatic decision criteria should be listed in support of FMU fire management strategies (Section III). The decision criteria used in Stage I implementation should be based upon the criteria used in FMU development. The Stage I analysis documents the current and predicted situation, documents all appropriate administrative information, and aids managers by providing them with decision criteria to make the initial decision whether to manage the fire for resource benefits or to take suppression action.

1. Describe the objectives of wildland fire use and how they relate to land and resource management direction. Include discussion on collaborative planning, decision making, and implementation processes.

2. Describe the wildland fire relative risk assessment process (Implementation Guide) and any area-specific environmental parameters will be used to make informed management decisions for wildland fire use. If applicable, include specific criteria that would be used to make a decision on wildland fire use during the WFIP process such as time of year, position of ignition within the FMU, ERC/BI index, etc. Define the

park's weather monitoring capability and network, including applicable cooperators (list all NPS and other organization weather stations, locations, applicable fuel models, etc.) that will be used in decision-making.

3. Describe all pre-planned wildland fire use implementation procedures. Include all annual pre-season and fire season activities necessary to prepare for, and implement, the wildland fire use program, such as interagency agreements, permits, compilation of weather/severity data, training needs, etc. Where possible, clearly identify all pre-planned actions (see Decision Criteria checklist, Short-term Implementation Actions, Implementation Guide, Chapter 4, Section C-2) and physically display pre-planned Maximum Manageable Areas (MMAs) at the FMU planning-level scale. Information about useful data for helping to manage wildland fire use incidents is included in the Wildland Fire Use Implementation Procedures Reference Guide, Appendix B.

4. Provide a general description for all wildland fire use implementation procedures that are not pre-planned.

    a. Include procedures for periodic assessment of wildland fire use applications (see Wildland and Prescribed Fire Management Policy Implementation Procedures Reference Guide).

    b. Include outlines and requirements for the preparation of wildland fire implementation plans, other project level plans, and documentation (e.g. Wildland Fire Implementation Plan, Wildland Fire Situation Analysis) (see Wildland and Prescribed Fire Management Policy Implementation Procedures Reference Guide).

5. Identify the staff positions that must be present to implement and manage the wildland fire use program. Identify the staff positions responsible for initiating and implementing steps in the decision process necessary to support the appropriate management response. Identify key resource draw down levels that will preclude wildland fire use implementation. State the relationship of wildland fire use implementation to the park's step-up staffing plan.

6. Include provisions for public information and interpretation of the wildland fire use program. Develop a list of key agency, interagency, state and congressional delegation contacts for inclusion in each WFIP at the Stage III level. See *RM 18*, Communication and Education chapter for additional guidance.

7. Develop a standard outline of contents for a permanent project record for each wildland fire use application. Include as a minimum:

    a. Approved planning document that guided management actions (e.g. Wildland Fire Implementation Plan). Include all amendments and revisions.

    b. Monitoring reports and summaries of findings, along with a summary of all monitoring activities including a monitoring schedule (level 1 and 2 monitoring).

    c. Revalidation and certification documents.

    d. Funding codes and cost accounting.

    e. Project maps. Permanently map and archive all fires greater than 10 acres, using GIS whenever possible. Park units without local access to GIS should draw upon regional resources. See *RM 18* Information and Technology Management chapter for more information about GIS and data standards.

    f. Other information as appropriate for the situation, such as photo points.

    g. Explain the funding/fiscal tracking of costs associated with wildland fire.

F. Fuels Management

1. Fuels Planning and Documentation

Multi-year fuels treatment plans are required elements of National Park Service Fire Management Plans. As part of the Fire Management Plan, the park must document the staff positions involved in developing and updating the multi-year fuels treatment plan, explain the decision process used to identify candidate projects, and describe the rationale and criteria used for project prioritization.

State that the fuels management program will implement fire management policies and help achieve resource management and fire management goals as defined in: (1) Federal Wildland Fire Management Policy and Program Review; (2) Managing Impacts of Wildfires on Communities and the Environment, and Protecting People and Sustaining Resources in Fire Adapted Ecosystems – A Cohesive Strategy (USDOI/USDA); and (3) *A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: 10-Year Comprehensive Strategy Implementation Plan*. The multi-year plans themselves are included as an Appendix to the Fire Management Plan.

a. Identify Participants.
Identify by title or position the key members of the interdisciplinary group that will be involved in developing and updating the fuels treatment program.

Example:
- FMO
- Fuels Specialist
- Natural Resource Specialist
- GIS/Data Coordinator

b. Identify Candidate Projects.
Each park should develop and articulate the decision process and assumptions they use to identify candidate fuels projects including why the fuels project locations were identified. They should also include a brief description of associated analysis and the collaborative processes used to identify candidate project areas. Depending on the unique park characteristics and fuels program goals, the decision process and analysis tools may be quite simple – or in the case of large complex terrain with multiple fuels goals – the process might be more involved and include more sophisticated analysis tools.

A clear description of the process is critical to developing agreement among the interdisciplinary planning team. Clearly articulating the

process also provides transparency and understanding among the larger range of partners and stakeholders.

Examples of decision processes/analysis:

- Evaluate hazard, risk, and values using GIS
- Evaluate areas showing departure from the desired fire regime
- Identify areas requiring periodic maintenance to meet management objectives

c. Describe Project Prioritization Criteria.
Once candidate projects are identified, projects must be prioritized. Often there will be more fuels projects identified than can be accomplished in any one year (or even within a five-year plan). The plan should describe how the park prioritizes projects for implementation, including how the collaboration process is used to prioritize projects in the park.

Examples of Prioritization Criteria:

- Extent of departure from natural process
- Degree of hazard
- Proximity to values at risk
- Logical project sequence (e.g. there may be a logical sequence to implementing linked or adjacent projects that suggests a priority)
- Maintenance cycle

d. Updating the Fuels Treatment Plan.
The multi-year fuels treatment plan should be reviewed annually and can be updated to include new projects and to drop or revise previously proposed projects. The updates should become part of the annual update to the Fire Management Plan and will require approval by the superintendent assuring that any changes in your treatment plan are within the authority of existing compliance documents.

The NPS Environmental Screening Form is recommended as a document to guide the review of current and proposed projects to ensure that they are within the scope of existing compliance. Projects that fall outside existing compliance may require completion of new compliance processes.

Consult with *Director's Order 12* and your environmental compliance specialist to determine the options available to you.

2. General Fuels Management Implementation Procedures

    a. Describe annual activities to prepare for and implement the program (do not include copies of specific prescribed fire unit burn plans or non-fire treatment plans).

    b. State that the activities proposed in the Fire Management Plan will be planned and implemented in accordance with *Reference Manual 18,* Fuels Management chapter and the *Interagency Standards for Fire and Fire Aviation Operations*.

    c. Describe the general fuels management strategy for each Fire Management Unit, and display planned fuel treatments. As appropriate, indicate fire regime type and condition class.

    d. State equipment and seasonal use restrictions by management area or FMU, including restrictions due to weather, species sensitivity, or other concerns that may affect equipment use. These may be found in the NEPA decision document.

    e. Describe general numbers and kinds of qualified personnel necessary to plan and execute the proposed fuel treatment program. For example, will a Type I burn boss be needed?

3. Prescribed Fire

    a. Define the weather, fire behavior and fire effects monitoring associated with prescribed fire applications. Include both short term and long-term effectiveness monitoring objectives, and any issues or concerns identified in related NEPA documents. Monitor for the measurable objectives identified for prescribed fire (see Section III). Emphasize protocols and criteria needed to determine if objectives have been met. The full monitoring plan should be included as an appendix or addendum.

    b. Provide format for reviews of prescribed fire projects.

    c. Describe reporting and documentation requirements for accomplishments and escaped fires.

    d. Develop historic fuel treatment map of past activities that effect planned actions.

e. Explain the local prescribed fire burn plan requirements and include a copy of the burn plan the Unit uses in the appendix. A description of the required prescribed burn plan elements can be found in the Interagency Prescribed Fire Implementation Procedures Reference Guide and *RM 18*, Fuels Management chapter.

f. State that prescribed fire planning and implementation will be in accordance with *RM 18*, Fuels Management chapter and *Interagency Standards for Fire and Fire Aviation Operations,* and the *Interagency Prescribed Fire Implementation Procedures Reference Guide.*

4. Non-Fire Fuel Treatments

Describe the scope of non-fire fuel treatment activities related to fuel hazard reduction and the total fire management program. Include discussion on collaborative processes in planning priority setting, and implementation.

a. State equipment and seasonal use restrictions by management area or FMU, including restrictions due to weather, species sensitivity, or other concerns that may affect equipment use.

b. Define the effects monitoring required. Include both short term and long term monitoring objectives, and any issues or concerns identified in related NEPA documents. Monitor for the measurable objectives identified for non-fire applications (see Section III). Emphasize protocols and criteria needed to determine if objectives have been met. The full monitoring plan should be included as an appendix or addendum.

c. State that the planning and implementation of non-fire fuels management projects will be in accordance with *Reference Manual 18*, Fuels Management chapter.

5. Emergency Rehabilitation and Restoration

Reference post-fire emergency rehabilitation (stabilization) and restoration planning and implementation.

Refer to the Interagency Burned Area Emergency Stabilization and Rehabilitation Handbook. The plan for accomplishing burned area rehabilitation should be included in the appendix. State that the emergency stabilization and rehabilitation actions will be in accordance with *Reference Manual 18,* Burned Area Emergency Response chapter.

V. ORGANIZATIONAL AND BUDGETARY PARAMETERS

A. State that the superintendent is responsible to periodically assess and certify by signature that the continued appropriate management response (AMR) strategy, including wildland fire use actions, are acceptable. The superintendent under certain conditions may delegate this responsibility to another organizational level. State that the park superintendent will meet the performance requirements stated in the *Interagency Standards for Fire and Fire Aviation Operations*.

B. Describe the organizational structure of the park fire management program and display a chart of each member's role and responsibility. Describe the outcome and any implications of the most recent Interagency Fire Program Management (IFPM) complexity analysis and designated IFPM positions within organization. Identify organization needed for implementation, indicating deficiencies (i.e. vacant or recommended but non-existing positions).

C. Relate the fire management organization to the rest of the NPS unit's organizational structure. For Area FMO's, define the Park Group FMO organization and responsibilities. If practical, a map showing Park Group relationships should appear in the FMP Appendix.

D. Describe the Fire Program Analysis (FPA) Fire Planning Unit (FPU) of which a park is a participant for implementation of the fire program analysis. Partnerships, resource sharing relationships, assistance relationships (the FPU charter, an FPU map, and documents relating to the interagency and inter-unit relationships) may be included in the FMP Appendix. Summarize charter agreements and structures within the FPU that govern the formulation of budget requests. State the fire analysis system will be used to support fire planning, inform budget development and implementation, and identify cost effective fire programs.

E. Describe interagency coordination needed to implement the Fire Management Plan.

F. Describe key interagency contacts by function. A contact list should carry a date indicating its most recent update and be part of the appendix for operational purposes.

G. List and describe all fire-related agreements (put copies of all referenced agreements in the appendix including equipment rental agreements and contract suppression and prescribed fire resources).

VI. MONITORING AND EVALUATION

NPS fire management needs to be driven and supported by scientific information in order to facilitate an adaptive management cycle, which should result in the implementation of safe and effective fire management strategies. Adaptive management processes must incorporate monitoring and evaluation data as another link in modifying and supporting management goals, objectives, strategies, and activities (see *RM 18* Fire Ecology and Monitoring chapter.

A. In this section of the fire management plan, please provide:

1. A brief summary of existing monitoring data and how it has been used to support fire management decisions.

2. A brief summary of ongoing monitoring that will be utilized to support the fire management of this NPS unit. For example, data collected on fire behavior, weather and effects, non-fire or BAER treatments, or a park's/ neighbor's inventory and monitoring program).

3. A brief summary of how the park manages data collection when fire management crosses jurisdictional boundaries, e.g., wildland fire.

4. A brief summary of who collects and manages the data.

5. A brief summary of how these data will be used in the review and update process.

B. In most cases, a monitoring plan should accompany the fire management plan as an appendix, and should be designed to fulfill the requirements found in *RM 18,* Fire Ecology and Monitoring chapter. NPS units using prescribed fire or wildland fire use, or altering the arrangement of wildland fuels to modify fire behavior, must prepare a fire monitoring plan or plans. For units without wildland fire use and prescribed fire programs, the decision regarding whether a fire monitoring plan is necessary should be made collaboratively by the regional office fire staff, the unit fire staff, and the unit resource management staff.

Ensure that the monitoring plan explains how the monitoring data will be communicated to in-park peers and interested parties, interagency interested parties, and the fire and resource management scientific communities. In the monitoring plan, define data standards that articulate all data collection and storage

information including digital data and digital data that is GIS-compatible.

VII. FIRE RESEARCH

Research considerations are important to NPS fire management implementation. Adaptive management processes can incorporate research findings as another link in modifying treatment objectives, and refining land management objectives and goals.

Existing research applicable to a unit's fire management program should be examined to aid in determining desired ecological conditions, developing appropriate management goals and objectives, and writing appropriate treatment plans. This initial evaluation of existing research may also point out where additional research may be needed to aid in the development of management goals and objectives. Refer to *RM 18* Research chapter.

A. In this section of the fire management plan, please provide:

1. A brief bibliography or summary of existing research applicable and important to the unit's wildland fire management program and desired conditions.

2. A summary of ongoing fire research directly related to this NPS unit.

3. A summary of fire research needed to implement or refine the wildland fire management program and/or desired ecological conditions.

VIII. PUBLIC SAFETY

A. Briefly describe all public safety issues and concerns (highways, developments, evacuation plans, etc.).

   Utilizing a summary in tabular format for this section would be appropriate, with the inclusion of a map showing highlighted areas of safety concerns.

B. Describe park specific procedures for mitigating safety issues.

   This may only require reference to other park emergency response documents (i.e. evacuation plans) or other operational documents (i.e. smoke management plan) if appropriate.

   If referenced documents don't cover all the fire related safety issues described in section A. above, provide mitigation procedures here.

IX. PUBLIC INFORMATION AND EDUCATION

A comprehensive communication and education program emphasizes the entire scope of wildland fire management activities, particularly the role of fire in ecosystems. Develop a Fire Communication Plan which reflects the entire scope of the fire management program.

A. See *RM 18* Prevention chapter, and *RM 18* Communication and Education chapter for recommendations and additional direction. In addition, NWCG's Best Practices in Communication Planning can be a good source of information. http://www.nwcg.gov/teams/wfewt/bp/comm-planning.pdf

B. Describe public information capabilities and needs to implement the fire management program.

1. Include contact list for planned (Rx) or unplanned ignitions in an appendix.

   Examples:
   - Fire management staff
   - Agency leadership and staff beyond fire management
   - Local emergency responders (police, structure fire)
   - Clinics
   - Neighbors (property owners, adjacent agencies)
   - Local, regional, state, tribal, and national elected officials
   - Local schools
   - Newspaper, other media
   - Researchers whose work may be affected
   - Community members who have included a desire to know about project due to health or other issues

2. Materials needed to support public information needs
   - Brochures describing positive aspects of fire
   - Descriptions of anticipated projects and estimated dates for projects
   - Maps for use in public information settings
     e.g., briefing maps for library lobby, courthouse, grocery stores.

3. Press kit
   - Descriptive background documents
   - Fact sheets
   - Personnel profiles
     e.g., Superintendent, FMO

4. Online resources like a pre-prepared web page
   - Contact phone numbers

- Mechanism for public comment
  e.g., e-mail address, telephone number(s)
- Maps
- Link to geomac.usgs.gov
- Link to www.firewise.org/
- Link to http://www.nifc.gov/fire_info.html

C. Describe "step-up" public information activities and capabilities in response to escalating fire danger, fire activity, smoke impacts, and/or public and media scrutiny.

X. PROTECTION OF SENSITIVE RESOURCES

A. Include a summary of significant and/or sensitive cultural resources, and mitigation measures required to protect those resources.

- Refer to Section III, D.1. – "Discuss Physical and Biotic Characteristics of Administrative Unit" of the Fire Management Plan for cultural resources descriptions.

- Refer to Appendix D – "NEPA and NHPA compliance" of the Fire Management Plan. Appendix D. should contain all the required mitigation measures for protection of cultural resources that were included in the environmental analysis and Record of Decision. State that the requirements contained in the NEPA decision document (CE, FONSI, or ROD) and the Section 106 of the National Historic Preservation Act consultation documentation will be adhered to during the implementation of the fire management program.

B. Include developments, infrastructure, inholdings, and other improvements that require special consideration or protection.

- List actions necessary to prevent or mitigate negative impacts to these resources.

- Refer to Appendix D – "NEPA and NHPA compliance" of the Fire Management Plan for required mitigation measures for improvements.

XI. REVIEWS OF FIRE MANAGEMENT PROGRAMS, PROGRAM COMPONENTS, WILDLAND FIRES, AND THE FIRE MANAGEMENT PLAN

A. State that all wildland fires and fire-related incidents will be reviewed in accordance with *Reference Manual 18,* Wildland Fire and Program Reviews chapter and the *Interagency Standards for Fire and Fire Aviation Operations*.

B. Describe any park-specific standards and procedures for the review of wildland fires and prescribed fires. As necessary, include time frames and responsible parties for each type of critique or review.

C. State that the Fire Management Plan will be updated annually and that the park will document the process. An update to the Fire Management Plan will be prepared if indicated.

    1. The annual fire management plan update and the five year review is intended to keep the document current with policy and to ensure the fire management program includes a process of adaptive management to incorporate new knowledge, modernization, and the best available science. An annual update of the fire management plan is essential to ensure that the document continues to conform to current laws, objectives, procedures, strategies and terminology. The use of an Environmental Screening Form, particularly for parks considering adding new projects to their approved multi-year plan, is encouraged to document the environmental considerations during the update process.

    2. Critical annual updates to the fire management plan should include renewal of cooperative agreements, updates of contact names and numbers used during emergency responses, current delegations of authority, and updates for any policy changes. Updates and modifications to the multi-year fuels treatment plan may not have to be made annually, but should be reviewed annually to ensure that project prioritization and proposed implementation schedules are current and any additional new fuels projects are consistent with environmental compliance requirements and developed in a collaborative process with neighboring communities and agencies.

D. State that the Fire Management Plan will be comprehensively reviewed every five years at minimum.

    1. While five-year comprehensive reviews share similar purposes to the annual update process, the difference is that the five-year review includes a more intensive interdisciplinary approach to evaluating the fire management plan and program. The comprehensive review should include a broader consideration of new park planning direction, changing environmental or social conditions (example: increasing wildland-urban interface or global climate change effects), new

science, and adaptive feedback from fire program monitoring programs. The end result is to determine whether a major FMP plan revision and/or new environmental compliance process needs to be initiated.

2. A five-year review of the fire management plan does not automatically initiate new planning requirements. If no new planning requirements are indicated by the review, the results are documented and signed by the superintendent. If the results of the review indicates that significant changes in proposed actions, expected effects, or changes in park direction (example: a new decision that a park should now include wildland fire Use into their fire management program) a new plan and compliance document may be required.

XII. CONSULTATION AND COORDINATION

(Note: this section pertains to people and organizations that contributed to the development of the FMP. The related NEPA document will have a similar list, but that list will be specific to those people and organizations that were consulted in the development of that document.)

List contributors and reviewers of the plan; identify their role in this Fire Management Plan.

List all individuals and organizations consulted during plan development.

XIII. APPENDICES

A. References cited

B. Definitions

C. Species lists (sensitive species described in Section X)

D. Compliance for FMP and Fuels Management Program

1. NEPA - Include copy of Decision Document (Record of Decision) for FMP

2. NHPA (Section 106) - Include copy of response from SHPO for FMP

3. ESA (Section 7) - Include copy of response from FWS for FMP

E. Any other unit-specific supplemental information (may require annual revision)

1. Fire call-up list

2. Preparedness inventory

3. Cooperative agreements

F. Communication and Education Plan

G. Wildland and Prescribed Fire Monitoring Plan

H. Preparedness Plan (Items noted with * are required by NPS)

1. Initial Response, Dispatch, and Notification Plan *

    a. Describe the typical fire response, timeframe, and resource type as determined by factors such as time of year or fire danger. Describe fire dispatching and communication procedures. Describe notification process and contacts for wildland fires.

2. Strategic fire size-up procedures *

3. List of personnel available to assist with wildland and prescribed fires, including fire qualifications *

4. Annual Delegation of Authority from Park Superintendent *

5. Job Hazard Analyses for fire and fire aviation activities *

6. Identify location of current copy of Agency Administrator's Guide to Critical Incident Management (NFES 1356) *

7. Identify location of current fire cache inventory *

8. Structure protection inventory and needs *

9. Identify location of procedures for park evacuation and closure*

10. Minimum impact tactics guidelines that are unique to the park and, where needed, wilderness (minimum tool) considerations *

11. Cooperative Agreement(s) and Annual Operating Plan(s)

12. Fire weather and fire behavior description. Include information on weather, climate, fire season, fire danger indices, fuel models, and range of potential fire behavior for each FMU. Information here should be referenced in Section III and Section IV.

13. Fire Duty Officer guidebook

14. Identify location of pre-loaded WFSA files

15. Identify location of pre-loaded WFIP files

16. Identify location of geospatial data for managing large fires

17. Operational Considerations

    a. Aviation considerations (e.g. helispots, flight hazards, etc)

    b. Water sources

    c. Staging areas

    d. Natural barriers and control line locations

    e. Other

18. Logistical Considerations

19. Designated locations for ICP and Base Camp

    a. Medical facilities

    b. Utilities

    c. Radio Communications

    d. Other

20. Planning Considerations

    a. Park base map

    b. Vegetation and fuel maps

    c. Land status map

    d. Location of sensitive natural and cultural resources

    e. Restrictions and special concerns by management area

H. Multi-year fuels treatment plan, including prescribed fire and non-fire treatments, as needed

I. Fire Prevention Plan (if analysis indicates and NPS threshold met; see *RM 18*, Wildland Fire Prevention chapter)

J. Rental Equipment Agreements

K. Contracts for Suppression and Prescribed Fire Resources

L. Notification procedure and contact list in the event of serious injury or death

M. Specific details and standards for Burned Area Emergency Response and fire rehabilitation

N. Other Park Specific Appendices